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| 10/720,203 | 11/25/2003 | Markus Schmidt-Karaca | 11884/407701 | 4988 |

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| EXAMINER |
|---|
| HOANG, HIEU T |

| ART UNIT | PAPER NUMBER |
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| 2152 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | **Application No.** | **Applicant(s)** |
|---|---|---|
| | 10/720,203 | SCHMIDT-KARACA ET AL. |
| **Office Action Summary** | **Examiner** | **Art Unit** | |
| | Hieu T. Hoang | 2152 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on <u>25 November 2003</u>.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) *1-15* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-15* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>25 November 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____.

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

1. This office action is in response to the communication filed on 11/25/2003.

2. Claims 1-15 are pending and presented for examination.

### *Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 9 is rejected under 35 U.S.C. 101 the claimed invention is directed to non-statutory subject matter. A data structure per se is non-statutory subject matter.

### *Claim Rejections - 35 USC § 112*

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: although the claims are system claims, there is no explicit connection or relationship between the components of the claims, e.g., a server, a database, and an administrative module. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

7.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102
>
> of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject
>
> matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art
>
> to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was
>
> made.

8.     Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Caufield et al. (US 2007/0177571, hereafter Caufield), in view of Chasman et al. (US

2007/0180075, hereafter Chasman).


9.     For claim 1, Caufield discloses a method for representing a distributed software

application comprising:

each computing entity is associated with at least one resource ([0024] lines 1-7,

[0028] lines 6-21, association between the user ID of the device and component);

storing at least one application descriptor, wherein the application descriptor

describes the association between each of the at least one computing entity

participating in the application and each of the respective resources ([0024] lines 1-7,

[0028] lines 6-21, association between the user ID of the device and component or

resources that the user is allowed to synchronize with the server);

providing access to the application descriptor in order to facilitate administration

of the distributed software application (fig. 2, [0024], abstract, meta-data relationship for

roles and component association for synchronizing or distributing data).

Caufield does not explicitly disclose:

determining at least one distributed application, the application including the

collective behavior of at least one computing entity;

However, Chasman discloses:

determining at least one distributed application (fig. 4, update request message

containing a business object type of sales opportunity for sales applications), the

application including the collective behavior of at least one computing entity (fig. 4,

MTwain is the user of the application requesting update information or collective

behavior);

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Caufield and Chasman to utilize the role-

component relationships of Caufield to authorize users to access a particular data type

in the synchronization process.

10. For claim 12, the claim is rejected for the same rationale as in claim 1.

11. For claim 5, Chasman discloses a method for representing a software application

operating within a mobile environment, the mobile application including the collective

behavior of a mobile device a middleware server and a backend server comprising:

specifying a behavior for the mobile device (fig. 4, receiving update request

including user inputs at the device);

determining at least one first resource to be associated with mobile device, at

least one second resource to be associated with the middleware server and at least one

third resource to be associated with the backend server as a function of the specified

behavior for the mobile device (fig. 4 and 7, [0024], [0031], identifiers for resources at

application server and mobile device and access server, after receiving the update

request, determining resource or data to be synchronized by comparing the update

request with the master database and send the synchronized data to the client device);

Chasman does not explicitly disclose:

storing an application descriptor, the application descriptor describing the

association between the first resource, the second resource, the third resource and,

respectively, the mobile device, the middleware server and the backend server;

However, Caufield discloses:

storing an application descriptor, the application descriptor describing the

association between the first resource, the second resource, the third resource and,

respectively, the mobile device, the middleware server and the backend server ([0024]

lines 1-7, [0028] lines 6-21, association between the user ID of the device and

component or resources that the user is allowed to synchronize with the server)

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Chasman and Caufield to utilize the role-

component relationships of Caufield to authorize users to access a particular data type

in the synchronization process.

12.    For claims 2, 6 and 13, the claims are rejected as in claims 1, 5, and 12.

Caufield-Chasman further discloses the application descriptor is stored at a network

node, the network node performing administrative tasks with respect to the distributed

application (Caufield, fig. 1, network server, distributing data by synchronization upon

request).

13.    For claims 3, 7 and 14, the claims are rejected as in claims 1, 5, and 12.

Caufield-Chasman further discloses the application descriptor is used for at least one of

configuration, deployment of the distributed application (Caufield, abstract,

synchronization).

14.    For claims 4 and 15, the claims are rejected as in claims 1 and 12. Caufield-

Chasman further discloses the distributed application is installed on a network including

an application server, a middleware server and a mobile device (Caufield, fig. 1,

application server, access server and mobile device).

15.    For claim 8, Caufield-Chasman further discloses the at least one first resource, the at least one second resource and the at least one third resource are deployed to at least one of the mobile device, the middleware server and the backend server as a function of the application descriptor (Caufield, fig. 2, abstract, synchronizing application data between application server and mobile devices based on role-components authorization of users).

16.    For claim 9, Chasman discloses a data structure for representing a distributed software application, the data structure including: a unique identifier for representing a distributed software application (Chasman, fig. 2, business object identifier); at least one identifier specifying at least one computing entity to participate in the distributed software application (Chasman, fig. 4, user in update request); at least identifier specifying at least one resource (Chasman, fig. 3, business object new version is the resource);

Chasman does not disclose an association between each of the at least one computing entity and the at least one resource;

However, Caufield discloses an association between each of the at least one computing entity and the at least one resource (Caufield, [0024] lines 1-7, [0028] lines 6-21, association between the user ID of the device and component or resources that the user is allowed to synchronize with the server).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Chasman and Caufield to utilize the role-component relationships of Caufield to authorize users to access a particular data type in the synchronization process.

17.     For claim 10, Chasman discloses a system for administering a distributed software application including the collective behavior of a plurality of computing entities within a network comprising:

a server including a processor, said processor performing at least one of deploying, configuring and updating the distributed application with respect to the computing entities within the network (fig. 1, abstract, application server for synchronizing or deploying, configuring and updating data to the mobile device of a user);

at least one administrative module, the administrative module performing administration tasks for the application with respect to the computing entities participating in the application (fig. 1, abstract, application server for synchronizing or deploying, configuring and updating data to the mobile device of a user)

Chasman does not explicitly disclose:

a database for storing at least one application descriptor, the application descriptor representing an association between at least one distributed application, computing entities participating in the application and resources to be associated with the computing entities;

However, Caufield discloses:

a database for storing at least one application descriptor, the application

descriptor representing an association between at least one distributed application,

computing entities participating in the application and resources to be associated with

the computing entities ([0024] lines 1-7, [0028] lines 6-21, association between the user

ID of the device and component or resources that the user is allowed to synchronize

with the server);

Therefore, it would have been obvious for one skilled in the art at the time of the

invention to combine the teachings of Chasman and Caufield to utilize the role-

component relationships of Caufield to authorize users to access a particular data type

in the synchronization process.


18.     For claim 11, the claim is rejected as in claim 10. Chasman-Caufield further

discloses the administrative tasks include at least one of configuration, deployment of

the distributed application (Chasman, abstract, synchronization).

### *Conclusion*

19.    The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

- Salem et al. US 2003/0084104.

- Heard et al. US 2006/0236363.

- Mettala et al. US 2004/0215669.

- Sivaraman et al. US 2004/0205263.

- Hu. US 2003/0182408.


20.    Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-

1253.  The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m.,

EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913.  The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
1/3/8